Application No.: 10/626,225 Docket No.: TOW-034RCE

## <u>REMARKS</u>

Applicants amend claims 1-5. Support for the amendment can be found throughout the application and at least at Page 9, line 25 to Page 10, line 9, Page 12, line 24 to Page 13, line 4, and Figs. 1-2. No new matter is added. Upon entry of this amendment, claims 1-5 are presented for examination, of which claim 1 is independent. Applicants respectfully submit that claims 1-5 define over the art of record.

## Claim Rejection Under 35 U.S.C. §102 and §103

In this final Office Action, the Examiner maintains the rejection of claims 1-5 under 35 U.S.C. §102(e) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over United States Patent No. 6,492,055 to Shimotori et al. (hereafter "Shimotori"). Applicants respectfully submit that the Shimotori reference does not teach or suggest a unit cell that includes a first separator and a second separator and a coolant flow passage formed along surfaces of said first and second separators between said first separator of one unit cell and said separator of an adjacent unit cell such that a coolant flows along said surfaces of said first and second separators while a direction in which said reactant gas flows crosses a direction in which said coolant flows, as recited in amended claim 1.

The Shimotori reference teaches a unit cell that has one separator 10, two seal gaskets 9, and one membrane electrode assembly 8. In contrast, amended claim 1 recites that each unit cell has two separators: a first separator and a second separator. The Shimotori reference further teaches that each separator 10 has two surfaces each facing one of the electrodes (cathode 8c or anode 8b), where one surface has fuel gas passages 11 and the other surface has oxidant gas passages 12. Separator 10 can be partitioned into two halves, such as seen in Fig. 3; however there is no coolant passage formed along any surface of the separator such that a coolant flows along the surface of the separator. The Shimotori reference teaches coolant passages 15 that penetrate through every element in a unit cell such that coolant flow perpendicular to the surface of the separators 10 in the Shimotori reference. In contrast, amended claim 1 recites a coolant flow passage formed along surfaces of said first and second separators between said first separator of one unit cell and said separator of an adjacent unit cell such that a coolant flows along said surfaces of said first and second separators while a direction in which said reactant gas flows crosses a direction in which said coolant flows.

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Applicants respectfully submit that the Shimotori reference does not teach or suggest each and every element and limitation of claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of independent claim 1.

Applicants note that the dependent claims also recite patentable subject matter. As such, for this and the reasons set forth above, Applicants respectfully submit that the dependent claims also define over the art of record.

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## **CONCLUSION**

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants submit herewith a Request for Continued Examination. Applicants believe no other fee is due with this statement. However, if additional fee is due, please charge our Deposit Account No. 12-0080, under Order No. TOW-034RCE from which the undersigned is authorized to draw.

Dated: November 9, 2006

Respectfully submitted,

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